



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/695,951	10/25/2000	Mark T. Cranna	010211.0045	4713

7590 08/20/2002

Mark D Giarratana
Cummings & Lockwood
700 State Street
P O Box 1960
New Haven, CT 06509-1960

EXAMINER

DEXTER, CLARK F

ART UNIT

PAPER NUMBER

3724

DATE MAILED: 08/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

S.M.

Office Action SummaryApplication No.
09/695,951Applicant(s)
Cranna et al.Examiner
Clark F. DexterArt Unit
3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on May 24, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-14, and 21-40 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-14, and 21-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2, 5 6) ☐ Other:

Art Unit: 3724

DETAILED ACTION

1. The amendment filed May 24, 2002 has been entered. It is noted that in view of the new amendment practice under 37 CFR 1.121 which became mandatory for all amendments on March 1, 2001, and due to the limited amount of examining time per application, if the amendment contains changes to existing language that requires a marked-up version showing those changes, the Examiner is relying upon the marked-up version(s) for examination of the application. It is applicant's responsibility to ensure that the clean version(s) is (are) the same as the marked-up version(s). It is further noted that the clean version(s) is (are) considered to be the Official version(s).

Election/Restriction

2. Applicant's election without traverse of Group I (claims 1-5, 7-14 and 21-40) in the response filed May 24, 2002 (paper no. 4) is acknowledged. Claims 6 and 15-20, which were drawn to a nonelected invention, have been canceled by applicant.

Information Disclosure Statement

3. The information disclosure statements filed January 29, 2001 (paper no. 2) and July 2, 2002 (paper no. 5) have been received and the references listed thereon have been considered.

Art Unit: 3724

Drawings

4. The drawings are objected to because of the following informalities.

In Figure 1, the bump at section line 3--3 is indicated by numeral 30 which is improper since numeral 30 has already been used to indicate another feature, and it seems that numeral 30 should be changed to --42--;

In Figure 2, the dashed vertical line should be labeled for clarity; and

In Figure 4, numeral 116 should be added to indicate the back edge of the saw blade.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Abstract

5. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

Art Unit: 3724

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

6. The abstract of the disclosure is objected to because the clean version thereof was not submitted on a separate page as required. Additionally, the abstract is too long and includes the following informalities: in line 2, "includesa" as one word is improper; in line 7, "ttheset" is improper.

Appropriate correction is required. See MPEP § 608.01(b).

Specification

7. The disclosure is objected to because of the following informalities:

On page 7, line 5, "S1" is redundant and should be deleted.

On page 9, line 2, it seems that --surface-- should be inserted after "shelf" or the like for clarity; in line 3, "16" appears to be inaccurate since it refers to a feature in another embodiment, and it seems that it should be changed to --116-- or the like for clarity.

On page 10, line 13, "A" should be changed to --The-- for clarity since the tooth has already been introduced; in line 13, "217" is inaccurate, and it seems that "217 is also" should be changed to --220--, and in line 14, "which" should be deleted for clarity.

Appropriate correction is required.

Art Unit: 3724

Claim Rejections - 35 USC § 112

8. Claims 2-5, 7-9, 12-14, 23-33 and 36-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, line 3, ✓“the movement” lacks positive antecedent basis.

In claim 9, line 2, ✓the recitation “of from between” is awkward and vague as to what is being set forth.

In claim 23, line 2, “a plurality of set teeth” is vague as to whether it refers to that previously set forth or to another such plurality. ←

In claim 27, line 8, ✓“a tooth” is vague as to which tooth is being referred.

In claim 30, line 3, ✓“the movement” lacks positive antecedent basis.

In claim 36, line 2, ✓“a set tooth” is vague as to which set tooth is being referred, and it seems that “a” should be changed to --the respective-- or the like.

In claim 37, line 3, ✓“the movement” lacks positive antecedent basis.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Art Unit: 3724

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 34-37 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Grelck, pn 820,969.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grelck, pn 820,969.

Grelck discloses a band saw blade with almost every structural limitation of the claimed invention but lacks an explicit disclosure of the ratio $S1/B$ within the range of approximately 0.25 to approximately 0.75 as set forth in claim 38, and lacks an explicit

Art Unit: 3724

disclosure of the values of S1 and S2. However, the recited ratio and values would be the mere discovery of the optimum or workable ranges within the general conditions of the prior art and therefore obvious to one having ordinary skill in the art.

13. Claims 1-5, 7-11 and 21-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark, Re 31,433 (hereafter Clark '433), in view of Grelck, pn 820,969.

Clark '433 discloses a band saw with almost every structural limitation of the claimed invention but lacks a shelf located between the tip of each tooth and the bend plane. Grelck discloses a band saw a shelf (e.g., c, c1, c2; d1, d2) on each tooth and teaches that the shelves (i.e., projections) act as sawdust removers which remove saw dust as it is produced thus preventing the saw from becoming overheated. Therefore, it would have been obvious to one having ordinary skill in the art to provide such shelves on the band saw of Clark '433 at least for the benefits taught by Grelck.

Regarding claims 3, 4, 7-11, 21-26 and 31-33, the combination lacks the specific ratios and dimensions set forth. However, these ratios and dimensions would be the mere discovery of the optimum or workable ranges within the general conditions of the prior art and therefore obvious to one having ordinary skill in the art.

Art Unit: 3724

Allowable Subject Matter

14. Claims 12-14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clark Dexter whose telephone number is (703) 308-1404. The examiner's typical work schedule is Monday, Tuesday, Thursday and Friday, and he can be reached during normal business hours on these days.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Allan Shoap, can be reached at (703)308-1082.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)308-1148. The fax numbers for this group are: formal papers - (703)305-3579; informal/draft papers - (703)305-9835.



**Clark F. Dexter
Primary Examiner
Art Unit 3724**

cfid
August 16, 2002